REMARKS

I. Status of the Claims

Claims 17-52 are pending.

Claims 18-32 and 34-52 are currently amended.

II. Claim Rejections

A. 35 USC §112

Claims 18-32, 35-41, 43, and 45-52 depended from canceled claims 1-16. Claims 18-32 and 34-52 are currently amended to recite correct dependencies.

Claims 34 and 42 each refer to *volume of (ablated) corneal tissue*, which is alleged to lack proper antecedent basis. Applicant respectfully traverses the rejection. Applicant submits that the cited phrases clearly refer to the phrase *...ablating a volume of corneal tissue...* in claim 33, from which claims 34 and 42 depend, and therefore have proper antecedent basis.

B. 35 USC §102

Claim 44 is rejected as being anticipated under 35 USC §102(b) by Lai US 5,984,916. Applicant respectfully traverses the rejection on the basis that it is improper and requests that the rejection be withdrawn.

As is clearly set forth in MPEP §2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claim 44 requires that within the readable medium of a laser ablation system programmed to deliver a standard myopia correction within an optical zone of the cornea, there be an executable instruction that otherwise directs the system to perform ablation outside of the optical zone of the cornea, which enhances the standard myopia correction procedure through a biodynamic response. As is known, a myopia correction involves flattening the cornea in a central region within the optical zone. There is always a concern that too much corneal tissue will be removed to achieve the necessary degree of correction, leaving a cornea that is too thin and thus unsafe. According to the claimed invention, the biodynamic response generated by the ablation outside of the optical zone produces a degree of central corneal flattening without removing functional corneal tissue within the optical zone.

Lai '916 neither discloses or contemplates a biodynamic ablation according to applicant's invention. Lai discloses an ophthalmic laser and surgical method that provide a more gentle and less traumatic ablation of corneal tissue during a typical myopia correction procedure. Lai uses particular laser beam parameters such as wavelength, pulse duration, beam flux, etc. to soften the blow, so to speak, each time a laser pulse hits the cornea and photo-ablates a tissue volume.

The examiner's reasoning that Lai's programmable control unit is capable to provide the recited (claimed) function misses the point. Undoubtedly, Lai's programmable control unit is capable of doing anything it can be programmed to do, however, applicant is not attempting to patent a programmable control unit. Such a device is prior art. Rather, applicant's programmable control unit includes a set of instructions that direct the laser system to perform a particular function. Lai's programmable control unit does not include

such an instruction set. Accordingly, Lai is insufficient to anticipate applicant's claimed invention.

Claims 33 and 44 are rejected as being anticipated under 35 USC §102(e) by Williams US 6,413,251. Applicant respectfully traverses the rejection on the basis that it is improper and requests that the rejection be withdrawn.

Williams '251 discloses a digital micromirror device (DMD) for use with a refractive laser surgery system, and control mechanisms for the DMD, to achieve better results than can be obtained with conventional broadbeam and spot-scanning refractive laser systems.

As disclosed at Col. 8, lines 49-67 and in Fig. 13 (cited by the examiner), Williams discusses and illustrates the multiple zones used in a multiple zone, multiple pass (MZMP) algorithm to deliver a spherical correction for treating myopia. Williams explains that *via* MZMP, each zone is corrected separately. Williams clarifies the term 'zones' when he states

> *Depending on the refraction correction, a certain number of optical zones are selected for correction. Referring to FIG. 13, these zones are sized 2.5 mm, 4.0 mm, 5.0 mm, 6.0 mm, and 7.0 mm in diameter and centered about the optical axis of the laser beam. The 2.5 mm and 7.0 mm zones are always selected and are termed the pretreatment and blend zones, respectively...The other zones are termed power zones ...TABLE 1 Optical Zones 2.5 mm 4.0 mm 5.0 mm 6.0 mm 7.0 mm...Table 1 describes the optical zones (OZ) used, and the percentages of refraction correction implemented over each optical zone for spherical and cylindrical corrections.*

(Col. 8, l. 33-Col. 9, l. 15; emphasis added).

Williams' use of the term "optical zones" as including a 7mm diameter zone is entirely consistent with applicant's disclosure on page 2 where it states: *The OZ* (optical zone) *typically ranges from about 3mm to 7mm depending upon a variety of factors well appreciated by those skilled in the art.* However, claims 33 and 44 both require *ablation outside of the optical zone*, to induce the biodynamic effects disclosed therein. Williams '251

makes no such disclosure nor suggestion and, therefore, is a defective anticipatory reference against claims 33 and 44.

Claim 17 is rejected as being anticipated under 35 USC §102(e) by Cox *et al.* US 6,926,710. Applicant respectfully traverses the rejection on the basis that it is improper and requests that the rejection be withdrawn.

Cox *et al.* pertains to methods and apparatus for developing and carrying out photorefractive treatments related to higher-order aberrations in consideration of biodynamical and biomechanical effects on treatment. Cox *et al.* specifically discloses that after a specific trauma that is associated with a LASIK procedure is inflicted on the cornea, a wavefront measurement can be made to evaluate the biomechanical effect of the trauma, which can then be used to adjust the LASIK procedure.

Cox *et al.* does not disclose

> *a method for laser vision correction, comprising providing a controlled biodynamic response in corneal tissue of an eye by inflicting a controlled trauma to an exposed corneal surface outside an identified optical zone for a myopia correcting nominal laser ablation of the cornea*

as recited in claim 17. Nor does the examiner point to any such disclosure in the '710 reference. The rejection is unsupported and should be withdrawn.

III. Conclusion

In view of the foregoing, applicant respectfully requests the examiner's reconsideration of the application. No extension of time is necessary to make this Amendment timely. Should applicant be in error, applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. §1.136(a) as necessary to make this Amendment timely, and hereby authorizes the Office to charge any necessary fee or surcharge

with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 50-1546.

Respectfully submitted,

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